ABSTRACT OF THE DISCLOSURE

An n-GaAs buffer layer, an n-AlGaAs lower cladding layer, an n- or i-InGaP lower optical waveguide layer, an InGaAsP quantum cell active layer, a p- or i-InGaP upper optical waveguide layer, a p-AlGaAs first upper cladding layer, a p- or i-InGaP etch-stopping layer, a p-AlGaAs second upper cladding layer, and a p-GaAs contact layer, are grown upon an n-GaAs substrate. A photoresist is coated on the wafer, and two grooves are formed by etching. Then, the photoresist on the perimeter of the device is removed and the contact layer is selectively etched. Next, the photoresist is lifted off. A SiO_2 film is formed on the entire surface. After a window is formed in a portion of the SiO_2 film corresponding to a ridge portion, a p-electrode is formed on a region of the SiO_2 film other than the device perimeter.